



THE THOMAS FIRE EMERGENCY RESPONSE AFTER-ACTION REVIEW

DECEMBER 2018



IN MEMORIUM

CORY D. IVERSON
Cal Fire Apparatus Engineer
&
Ms. VIRGINIA PESOLA

PHOTO CREDITS

Front Cover Main: Skip Robinson/Vertical Magazine; **Front Cover Thumbnails:** The Ventura County Sheriff's Office, The Ventura County Office of Emergency Services; **Page 1:** Jeff D. Muth; **Page 5:** The Ventura County Sheriff's Office; **Page 6:** The Ventura County Fire Department; **Page 12:** The City of Ventura; **Page 13:** The Ventura County Sheriff's Office; **Page 15:** The Ventura County Sheriff's Office; **Back Cover Main:** The Ventura County Fire Department; **Back Cover Thumbnails:** The Ventura County Sheriff's Office and Senior Airman Crystal Housman, California National Guard

Table of Contents

Executive Summary	1
Thomas Fire Brief.....	2
Thomas Fire Timeline	2-6
After Action Review Analysis.....	7
Improvement Plan Performance Matrix.....	13
Map Appendix.....	16
Glossary of Terms	22
Participating Agencies	23

This page intentionally left blank

Executive Summary

The Thomas Fire After-Action Review (AAR) process began informally. Both spontaneous and scheduled debriefs took place frequently at the Incident Command Post (ICP) and the Emergency Operations Center (EOC) throughout the duration of the incident. The debriefs ensured that critical areas requiring improvements were implemented immediately.

The formal AAR process was initiated in March of 2018. The objective was to measure strengths and to identify potential areas for improvement observed during the response phase of the incident. This process included representation from over twenty-five organizations that participated in seven functional AARs, internal organizational AARs and a comprehensive Operational Area (OA) AAR.

The strengths and areas identified for corrective action impact the OA's ability to respond to incidents; non-specific to any one organization. All OA stakeholders share the responsibility to reinforce standards and implement solutions.

The improvement plan serves as a framework to enhance the outcome of emergency management efforts and to serve as a guide for future funding decisions. Although this process focuses on the Thomas Fire, it is designed to strengthen the OA's effectiveness in response to emergency situations.

The after action report focuses on the following key areas:

- *Operational Area Coordination*
- *Incident Management*
- *Public Information and Emergency Notifications*
- *Mass Care and Shelter*
- *Mutual Assistance and Mutual Aid*

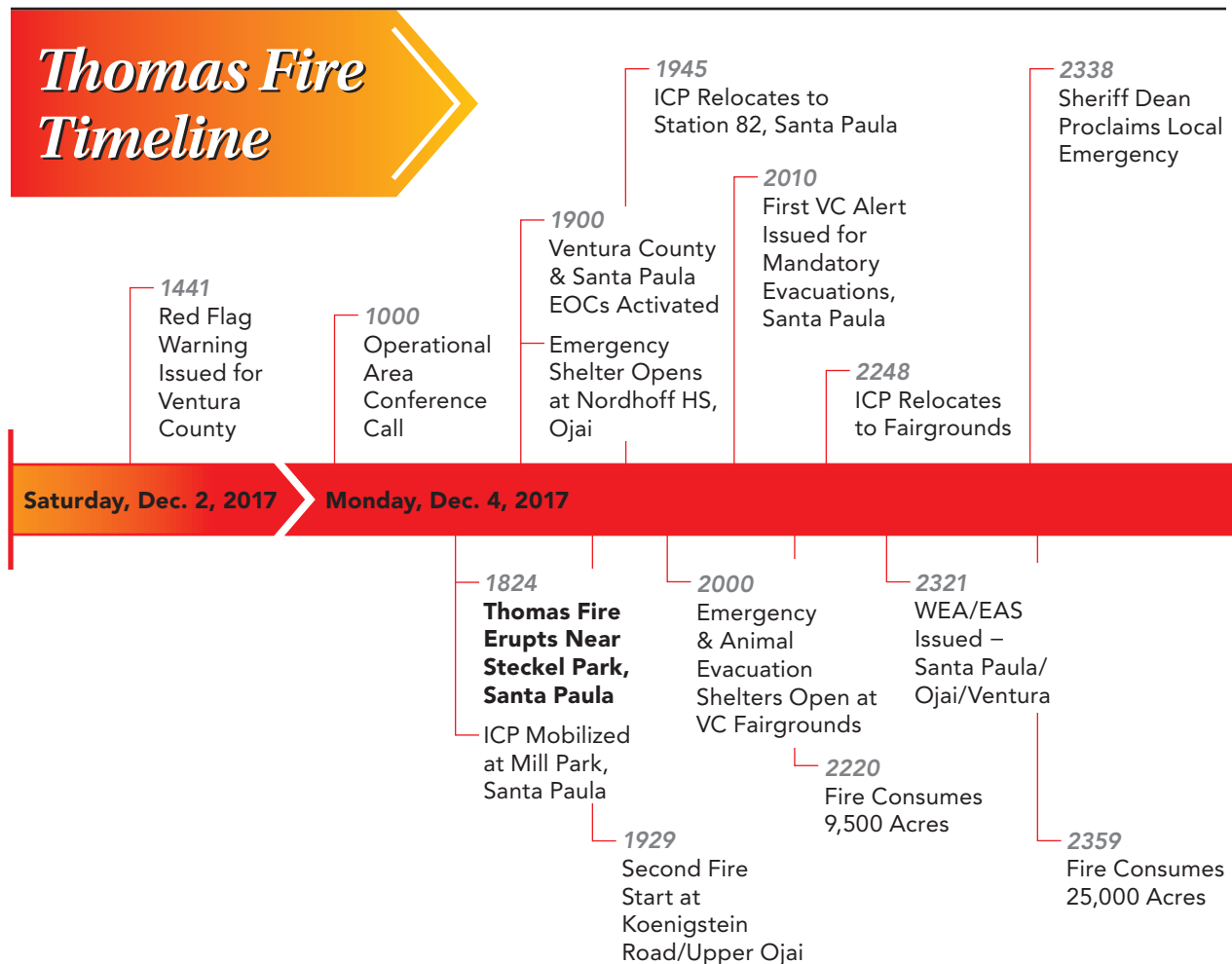


Thomas Fire Brief

Red Flag Warnings were issued for Ventura County, Los Angeles County and Santa Barbara County for the week of December 2 through December 8, 2017. The strongest sustained Santa Ana Wind event of the 2017 season anticipated wind gusts to reach between 50 to 70 mph. Low relative humidity and critically low fuel moisture levels set the stage for elevated fire danger. On the morning of December 4th, in anticipation of worsening conditions, the Ventura County Sheriff's Office of Emergency Services (VCOES) conducted an OA coordination conference call. Subsequently, numerous Ventura County public safety agencies augmented staff and pre-positioned critical resources. The Ventura County EOC elevated its state of readiness to enhanced operations.

At 1824 hours on December 4th, the Thomas Fire ignited in an unincorporated area north of Steckel Park and the City of Santa Paula. Shortly thereafter, at 1929 hours, a second fire ignited at Koenigstein Road in the Upper Ojai Valley. Driven by east winds, the fires quickly merged into one. Unified Command was established and the ICP mobilized at the Ventura County Fairgrounds. Due to the extraordinary progression of the fire, the Incident Commander (IC) ordered approximately seventy strike teams within the first two hours. During peak firefighting operations, local fire resources, supplemented by the fire mutual aid system, brought approximately 8,500 emergency response personnel, 968 fire engines and 35 aircraft.

continued



– STATS –

Multimodal Emergency Notification System

VC Alert (area specific)
64 Notifications Issued to 90,000 people

Wireless Emergency Alert (WEA)
2 Notifications

Emergency Alert System (EAS)
2 Countywide Notifications

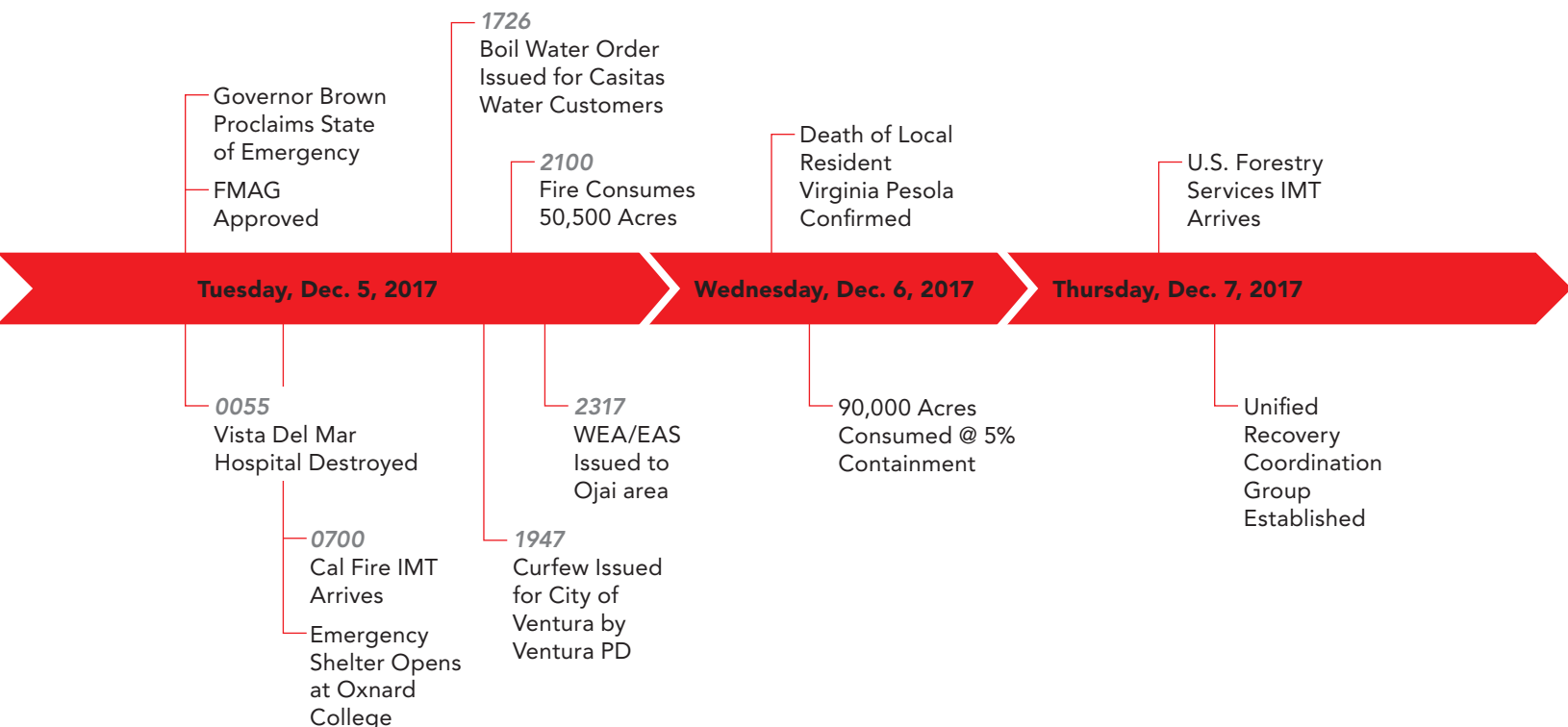
First Responder Door Knocks

Law enforcement personnel from within Ventura County conducted evacuations, road closures and traffic control. To supplement those efforts, numerous emergency notification methods were utilized to issue advisories, evacuations and boil water orders. Specifically identified geographic areas received emergency notifications via the VC Alert emergency notification system (VC Alert), the Wireless Emergency Alert (WEA) System, the Emergency Alert System (EAS) and first responder door knocks. Emergency information was accessible through numerous media outlets, social media platforms and the official county emergency website; which received over one million visits.

A total of six county and city EOCs were activated to support and coordinate response efforts in the areas of logistics, information management, contingency planning and shelter management. Five emergency shelters were activated and provided services to thousands of displaced residents, as well as large and small animals. Local, state and federal emergency proclamations and declarations made

continued

Thomas Fire Timeline



funding available for incident response and management costs, public assistance, individual assistance and hazard mitigation.

The Thomas Fire burned 281,893 acres between December 2017 and January 2018, making it the largest wildfire in California's history at the time. A California Department of Forestry and Fire Protection (Cal Fire) Apparatus Engineer, Cory D. Iverson, and Santa Paula resident, Virginia Pesola, sadly lost their lives to this tragedy. Over 1000 residential and commercial structures were destroyed, while more than 200 structures were left damaged. Over 90,000 residents were impacted by evacuation orders. Extensive disruptions to day-to-day quality of life were felt by many throughout the county due to school and business closures, poor air quality, prolonged and widespread power outages, water infrastructure impacts, freeway and road closures, losses to local agriculture and tourism. The negative economic impact surpassed hundreds of millions of dollars. To date, substantial acreage of the county's watershed remains compromised and primed for post-fire debris flows and flooding.

continued

– STATS –

Emergency Hotline Calls
20,000

Emergency Website Views
Over 1 million

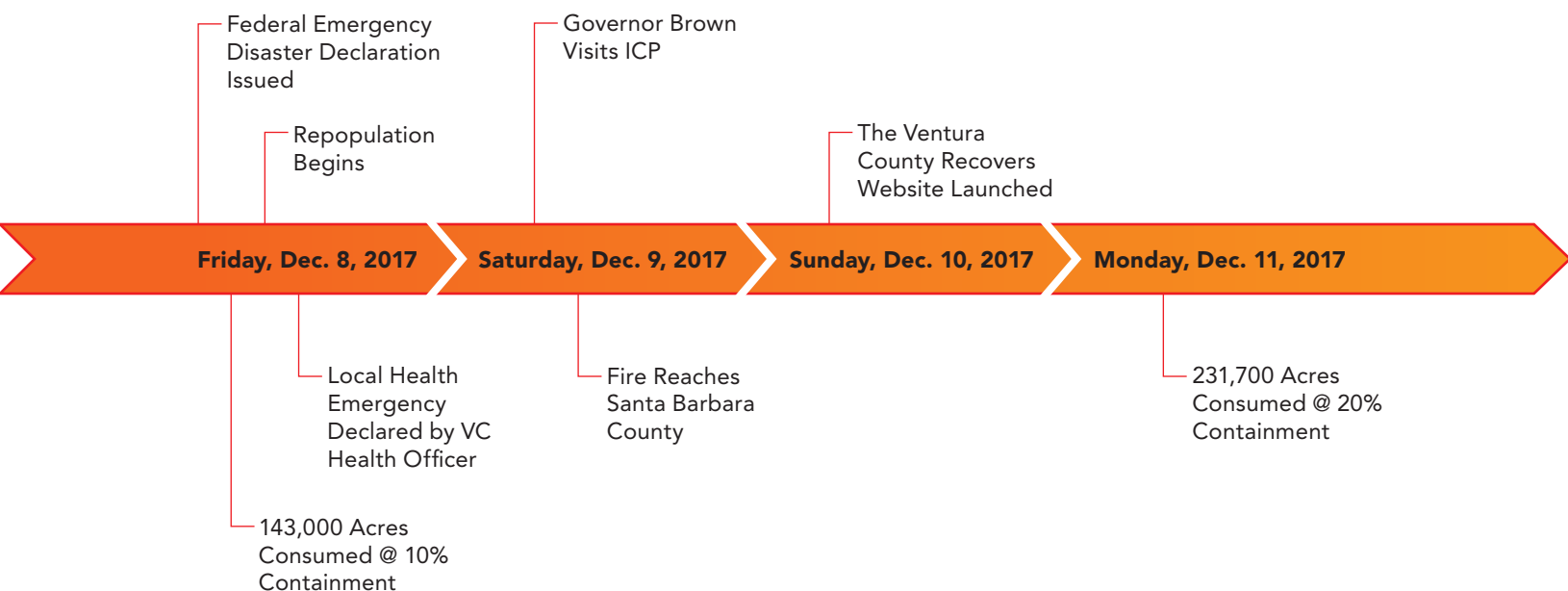
8,500+ Emergency
Response Personnel

968 Fire Engines

35 Aircraft

6 EOCs and
1 Incident Command Post

Thomas Fire Timeline



– STATS –

1063 Buildings Destroyed
(777 Residences)

281 Buildings Damaged
(210 Residences)

281,893 Acres Burned

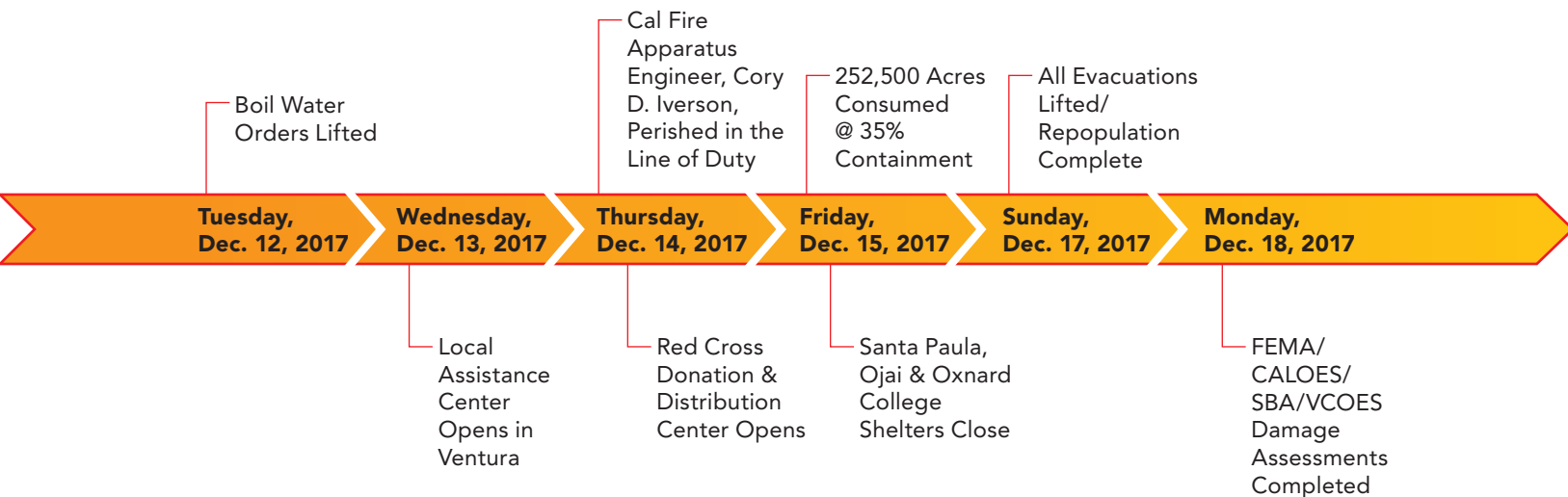
6 Thomas Fire Response
Community Meetings

2,900 Animals Evacuated
in **5** days

A Unified Recovery Coordination Group was established on December 7, 2017, to address debris management, health care, human services, housing, finance and watershed management.

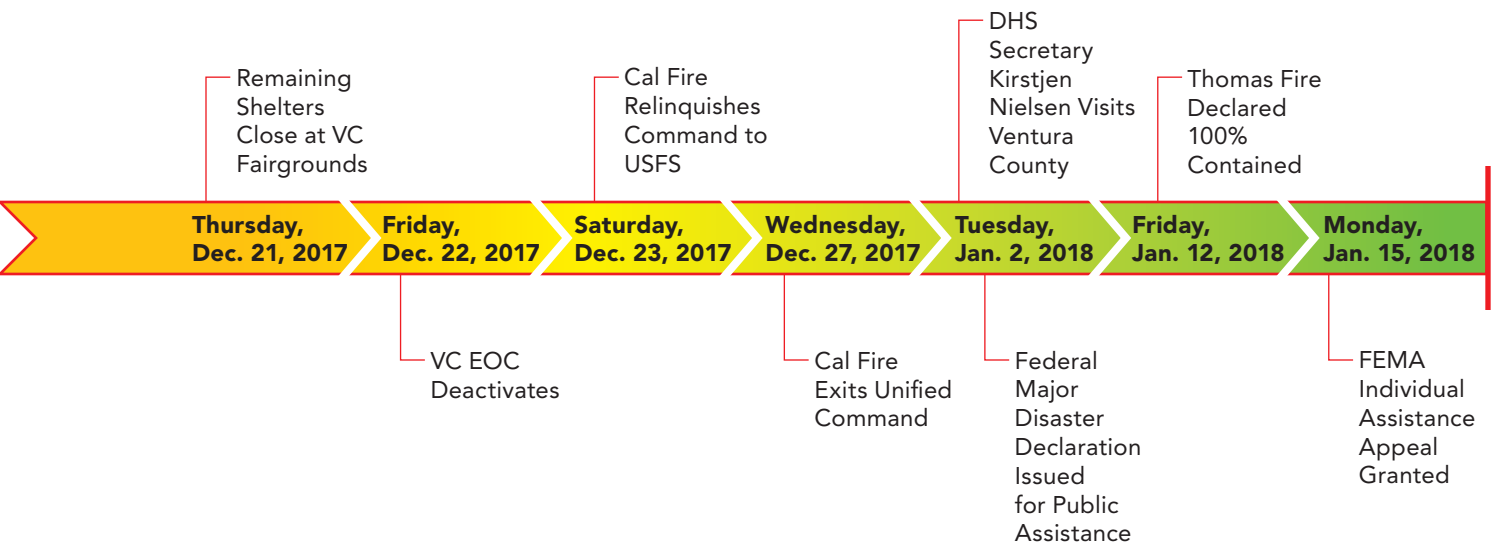


Thomas Fire Timeline





Thomas Fire Timeline



After-Action Review Analysis

OPERATIONAL AREA COORDINATION

STRENGTHS

- Pre-Incident Operation Area Coordination Meeting Agenda and Content
- Operational Area Notifications by Incident Command and EOCs
- Augmented Staffing Levels and Pre-Positioning of Field, ICP and EOC Resources

RECOMMENDED AREAS OF IMPROVEMENT

Pre-Incident Operational Area Coordination Meeting Stakeholder Participation

Consistent attendance of operational area coordination meetings is essential to preparedness and response. Expanded and consistent participation will increase situational awareness and enhance preparedness planning and response efforts.

Analysis: The VCOES hosts operational area coordination meetings, typically via a conference call, in anticipation of events that may lead to hazardous conditions or an incident. The objective is to provide situational awareness and coordinate preparedness planning. Some key stakeholders were absent from the coordination meeting prior to the Thomas Fire, which may have impacted some organizational readiness.

Recommendation: Update operational area coordination meeting invite list and invite process.

EOC Common Operating Platform

Common operating platforms facilitate information sharing and participation in collaborative planning.

Analysis: The Ventura County OA utilizes a web-based platform for providing a common operational picture for incident management. When the Thomas Fire occurred, the County EOC was transitioning to the newly acquired platform. Stakeholders who had not yet migrated to the new program experienced limited access to interactive information. Redundant systems and processes were in place and successful situational awareness was achieved.

Recommendation: Deploy the new common operational picture platform to necessary stakeholders.

INCIDENT MANAGEMENT

STRENGTHS

- Initial Incident Assessment and Deployment of Resources to Protect Life and Property
- Early Establishment of Unified Command and Formal Request for CalFire Incident Management Team (IMT)
- Incident Command Post and County EOC Coordination
- County EOC, CalOES and FEMA Collaboration
- Coordination Between County EOC and Unified Recovery Coordination Group

RECOMMENDED AREAS OF IMPROVEMENT

Incident Management Team Integration (In-Briefing and Authorities)

An IMT provides on-scene management support during events that exceed a jurisdiction or agency's capability or capacity. When IMTs are transitioning into command, in-briefings and/or delegations of authorities are conducted to ensure clear objectives and expectations are communicated.

Analysis: The CalFire IMT operates under the direction of the local jurisdiction responsible for the incident. Traditionally, when the IMT is activated, a transition meeting is held so that local leadership can communicate authorities and objectives. Due to the severity of the Thomas Fire, the IMT transition meeting took place via a phone call with limited participants, which contributed to operational challenges.

Recommendation: Update the existing IMT transition in-briefing template with draft authorities and objectives, including a list of organizations, so that it is applicable to all potential members of Unified Command.

Critical IMT Positions Staffed with Local Personnel

IMTs include personnel from local, state and federal agencies.

Analysis: Some Ventura County agencies and organizations staffed IMT positions throughout the organizational structure. Additionally, some of these agencies and organizations have formal incident command system training and qualification programs which directly correlate with the application of assigning personnel to positions within an incident. However, the complete IMT organizational structure was absent some critical local representation in operations and logistics positions. As a result, local objectives and protocols were not entirely addressed.

Recommendation: Identify and train personnel in critical IMT positions in agencies and organizations that do not currently have formal programs.

Evacuation and Repopulation

Evacuation and repopulation activities are inherently complex. Successful evacuation and repopulation activities during disasters require consensus among established leadership.

Analysis: Ventura County public safety agencies are highly experienced in conducting incident-driven evacuations and repopulations. The IMT transition contributed to missed opportunities for establishing a cohesive strategy, causing challenges in both areas.

Recommendation: Develop a local evacuation and repopulation guide to be shared with incoming teams.

Local Medical Health Operational Area Coordination (MHOAC)

The California State MHOAC program oversees the implementation of seventeen mandated medical and health care related functions and ensures that adequate medical and health resources are available during a local emergency.

Analysis: Local level challenges were experienced in coordinating MHOAC functions, causing operational and logistical inefficiencies.

Recommendation: Enhance the local MHOAC program.

PUBLIC INFORMATION AND EMERGENCY NOTIFICATIONS

STRENGTHS

- County EOC as the Single Issuing Point for Emergency Notifications
- Multi-modal Public Information Points (Dispatch Centers, Emergency Call Center, VC Emergency Website, Press Conferences, Community Meetings, Bulletin Boards, Social Media and Traditional Media)
- Command Post and EOC Joint Information System Coordination

RECOMMENDED AREAS OF IMPROVEMENT

Multilingual Communication

Emergency notifications are issued by authorities to the public in the event of a hazard posing a risk to life safety. Alerts include instructions on necessary steps to protect life and property.

Analysis: Thomas Fire emergency notifications, including evacuation orders, were initially issued in English. Other public information tools, such as Ventura County's emergency website, offered automated translation services. Within days, the public and community-based organizations expressed concerns for the need to enhance translation capabilities. Changes were made immediately to enable expanded capabilities.

Recommendation: Build and deploy multilingual capabilities in emergency notification messaging and emergency communications.

VC Alert Registration

VC Alert is Ventura County's local emergency notification system and is the primary tool for alerting the public about potential hazards and providing information on actions to protect life and property.

Analysis: VC Alert delivers notifications to geographically specific areas via landline phones, registered cell phones and email. Emergency service listing data is purchased by public safety without opt-in registration, whereas cell phone numbers must be registered by the account holder. Declining use of landlines in favor of cell phones limits messaging capabilities. The gap in coverage prevented emergency notifications to residents using only unregistered phones. Additionally, power outages adversely impacted the delivery of emergency notifications to landlines in certain areas.

Recommendation: Collaborate with legislators to develop "opt-out" emergency notifications legislation.

Ventura County Emergency Website Redundancy

The website, www.vcemergency.com, is essential to public information and is used to communicate incident information.

Analysis: Interruptions to the website during the initial hours of the Thomas Fire caused communication and public information challenges. The source was quickly identified and users were seamlessly redirected to an alternate site within minutes of the inconvenience. Within days, the website was re-established and both sites remained active without further interruption throughout the incident.

Recommendation: Enhance website user capacity and identify redundant platforms.

Depth of Trained Public Information Officer Staff

Public Information Officers (PIO) are professionals who serve as primary communicators and information coordinators for an incident.

Analysis: The IMT provided over seventy PIOs to assist with delivery of detailed public information. In the event that an IMT is not assigned to a future incident, Ventura County should bolster its cadre of trained PIOs.

Recommendation: Select, train and roster PIO Staff from the OA PIO group.

Media Access to Sensitive Sites (Shelters and Impacted Areas)

Sensitive sites materialize from incidents in the form of emergency shelters or destroyed and damaged communities. California Penal Code §409.5(a),(d) states that nothing shall prevent a duly authorized representative of any news service, newspaper, radio or television station or network from entering an area unless the area is determined to be a menace to the public health or safety, created by a calamity as defined.

Analysis: Policies and procedures providing direct access to these sites must align with the above referenced penal code. Organizations responsible for sensitive sites had established privacy policies, however, there were unanticipated challenges associated with applying the policies uniformly.

Recommendation: Update Emergency Operations Plan (EOP) Public Information Annex with sensitive site access process.

MASS CARE AND SHELTER

STRENGTHS

- Five Shelters Activated Immediately and Accomplished Core Mission
- Shelter Deactivation Operations Successfully Executed

RECOMMENDED AREAS OF IMPROVEMENT

Co-location of ICP, ISB, Emergency Shelter and Animal Shelter

The Thomas Fire ICP, an Incident Support Base and animal shelter, along with the largest public emergency evacuation center, were all co-located at the Ventura County Fairgrounds. This location accommodated over 9,000 people, thousands of animals from livestock to pets and was at full capacity staging operational equipment and resources.

Analysis: Co-locating these functions was inefficient and insufficient to properly serve the needs of each discipline's priority and function. Alternative locations were available but not utilized due to challenges associated with demobilizing and remobilizing shelters with large evacuee populations.

Recommendation: Review and update the Mass Care and Shelter Plan and identify governmental organization leads, roles and responsibilities.

Shelter Services and Capabilities (Staffing, Security, Health Care and Transportation)

Emergency shelters provide basic needs to persons displaced from an incident.

Analysis: Staffing and security needs for the emergency shelter at the Fairgrounds quickly emerged. The volume of evacuations overwhelmed the system in place, causing challenges with security, transportation and medical care. Self-deployed independent medical organizations arrived at shelters and operated autonomously. Additional issues with service and security were experienced as shelter populations transitioned from evacuees to populations requiring immediate alternative services.

Recommendations:

1. Review and update the Mass Care and Shelter Plan and identify governmental organization leads, roles and responsibilities.
2. Build shelter staff capabilities with Disaster Service Workers.

EOC Coordination for Shelter and Shelter Department Operations Center

Certain organizations have the primary responsibility for providing emergency shelters for impacted populations.

Analysis: Continuity was intermittently compromised between shelter operations and the County EOC which contributed to efficiency challenges.

Recommendations:

1. Review and update the Mass Care and Shelter Plan and identify governmental organization leads, roles and responsibilities.
2. Build shelter staff capabilities with Disaster Service Workers.

Donation Management (Financial and In-Kind)

Financial and in-kind donations were received from various sources, including the public, corporations, faith-based organizations and non-profit organizations. The influx of in-kind donations created an unanticipated diversion of personnel and security resources.

Analysis: Protocol for donations management procedures had not been formalized prior to the Thomas Fire, resulting in the decentralized management of both financial and in-kind donations.

Recommendations: Charter an Emergency Planning Council (EPC) ad hoc committee for donation practices and standards.

MUTUAL ASSISTANCE AND MUTUAL AID

STRENGTHS

- Use of Professional Contacts and Relationships to Supplement the Mutual Aid Process

RECOMMENDED AREAS OF IMPROVEMENT

System Responsiveness

Mutual aid systems exist to formalize the process of sharing resources across jurisdictional boundaries.

Analysis: The mutual aid systems were cumbersome to navigate and made obtaining resources difficult.

Recommendation: Provide support and contribute to the improvement of mutual aid systems.

Effectiveness of Mobilization

A successful response is reliant upon the ability to effectively deploy mutual assistance and mutual aid resources where needed.

Analysis: The OA organizations initially secured resources across jurisdictions via interpersonal contacts. As the need for resources increased, mobilization efforts were hindered by systems in place.

Recommendations:

1. Review and update Mutual Aid MOUs.
2. Conduct Mutual Aid training and workshops.

Awareness of Mutual Aid Opportunities and Processes

A successful response is reliant upon the ability to effectively deploy mutual assistance and mutual aid resources where needed.

Analysis: A small number of disciplines and jurisdictions experienced critical staffing and resource challenges, but were unfamiliar with the mutual aid process that could have enhanced their response capabilities.

Recommendation:

1. Review and update Mutual Aid Memorandums of Understanding (MOU).
2. Conduct Mutual Aid training and workshops.



Improvement Plan Performance Matrix

ISSUE	RECOMMENDED SOLUTION	LEAD COORDINATION AGENCY(IES)	ESTIMATED COMPLETION TIMELINE	PERFORMANCE STATUS
Operational Area Coordination				
Pre-Incident Coordination Call Stakeholder Participation	Update Operational Area Coordination Call Meeting Invite List and Invite Process.	VCOES	N/A	Completed
EOC Common Operating Picture Platform	Deploy the New Common Operational Picture Platform to Necessary Stakeholders.	VCOES	N/A	Completed
Incident Management				
Incident Management Team Integration (In-Briefing and Authorities)	Update the existing IMT transition in-briefing template with draft authorities and objectives, including a list of organizations, so that it is applicable to all potential members of Unified Command.	VCFD	Jul-19	Not Started
Critical IMT Positions Staffed with Local Personnel	Identify and train personnel in critical IMT positions in agencies and organizations that do not currently have formal programs.	VCFD/VCOES	Dec-19	In-Progress
Evacuation and Repopulation	Develop a Local Evacuation and Repopulation Guide to be Shared with Incoming Teams.	VCSO/VCFD	Dec-19	In-Progress
Local Medical Health Operational Area Coordination (MHOAC) Process	Enhance the Local MHOAC Program.	VCEMS	Dec-19	In-Progress



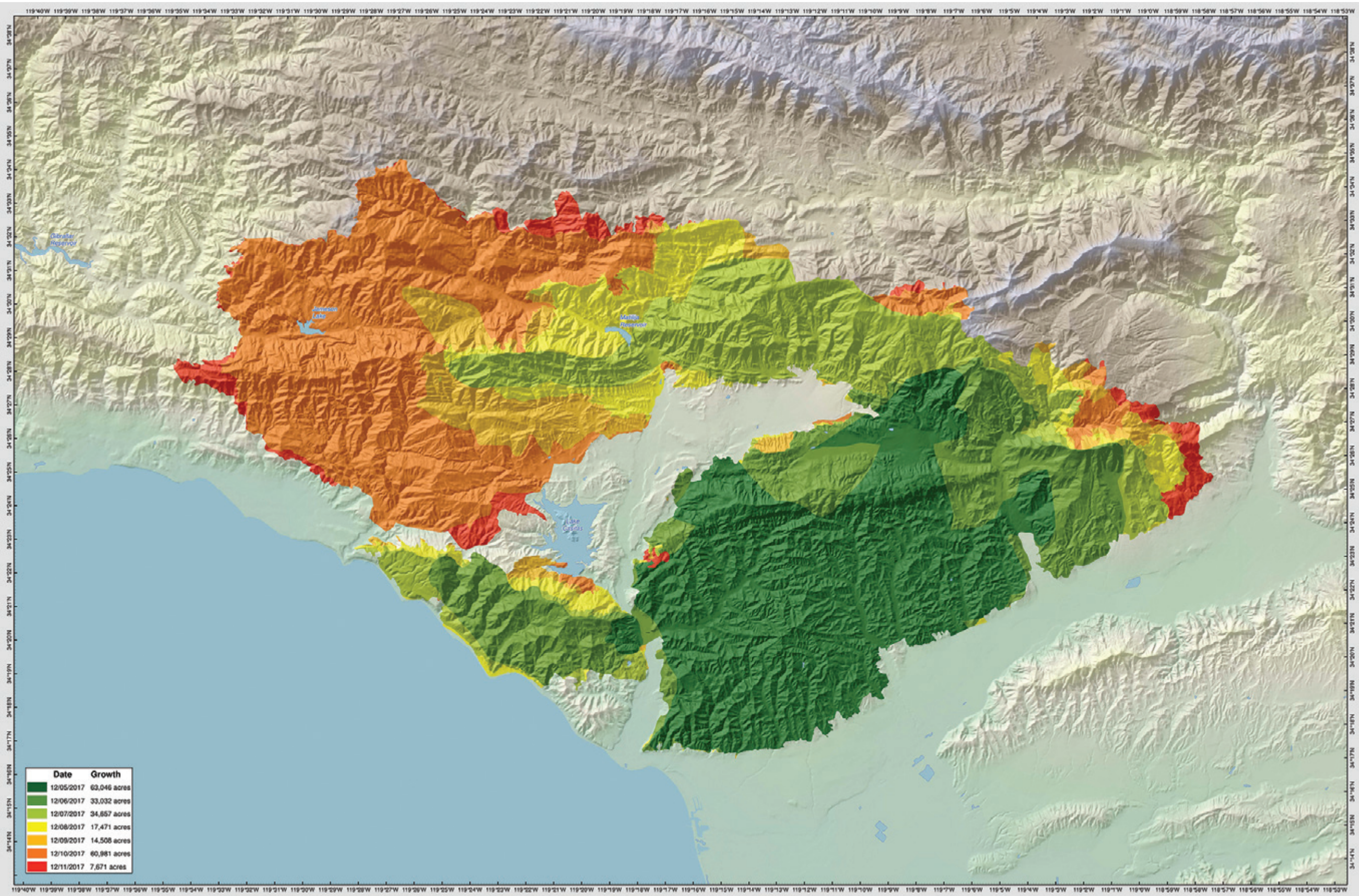
Improvement Plan Performance Matrix (cont.)

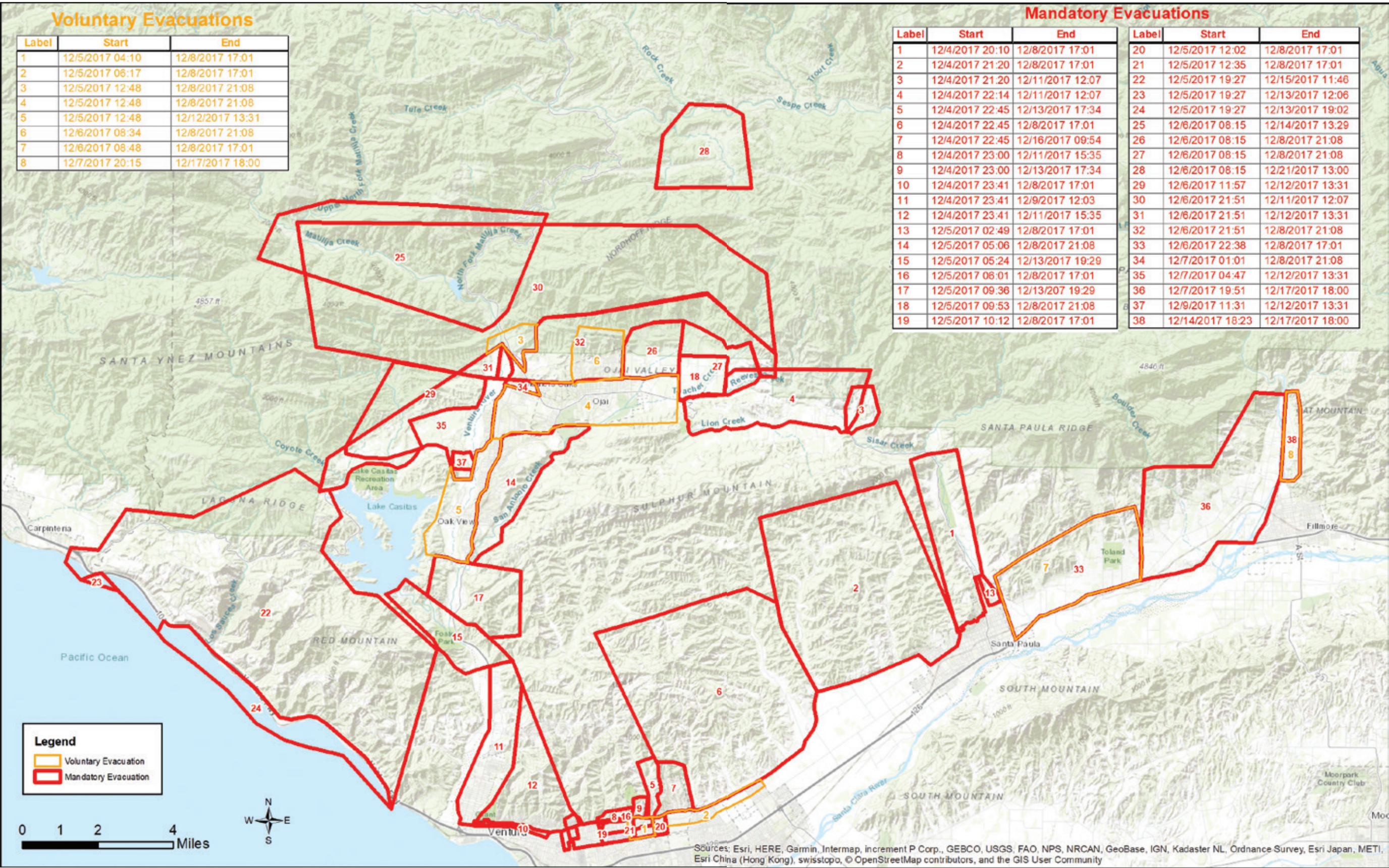
Public Information and Emergency Notifications				
Multilingual Communication	Build and Deploy Multilingual Capabilities in Emergency Notification Messaging and Emergency Communications.	VCCEO PIO/ VCOES	N/A	Completed
VC Alert Registration	Collaborate with Legislators to Develop "Opt-Out" Emergency Notifications Legislation.	VCOES	N/A	Completed
Emergency Website Redundancy	Enhance Website Capability and Identify Redundant Platforms	VCOES	N/A	Completed
Depth of Trained PIO Staff	Select, Train and Roster PIO Staff from the OA PIO Group.	VCCEO PIO/ VCFD PIO	Dec-19	On-Going
Media Access to Sensitive Sites (Shelters and Impacted Areas)	Update Emergency Operations Plan (EOP) Public Information Annex with Sensitive Site Access Process.	VCCEO PIO	Dec-19	In-Progress
Mass Care and Shelter				
Co-location of ICP, ISB, Emergency Shelter and Animal Shelter	Review and Update the Mass Care and Shelter Plan and Identify Governmental Organization Leads, Roles and Responsibilities	HSA/ Red Cross	Jul-19	In-Progress
Shelter Services and Capabilities (Staffing, Security, Health Care and Transportation)	1) Review and Update the Mass Care and Shelter Plan and Identify Governmental Organization Leads, Roles and Responsibilities. 2) Build Shelter Staff Capabilities with DSWs.	HSA/ Red Cross	Jul-19	In-Progress
Shelter, Red Cross Operation Center and EOC Resource Coordination and Support	1) Review and Update the Mass Care and Shelter Plan and Identify Governmental Organization Leads, Roles and Responsibilities. 2) Build Shelter Staff Capabilities with DSWs.	HSA/ Red Cross	Jul-19	In-Progress
Donation Management (Financial and In-Kind)	Charter an Emergency Planning Council (EPC) Ad Hoc Committee for Donation Practices and Standards.	VCOES	Jul-19	Not Started - Nov 1st

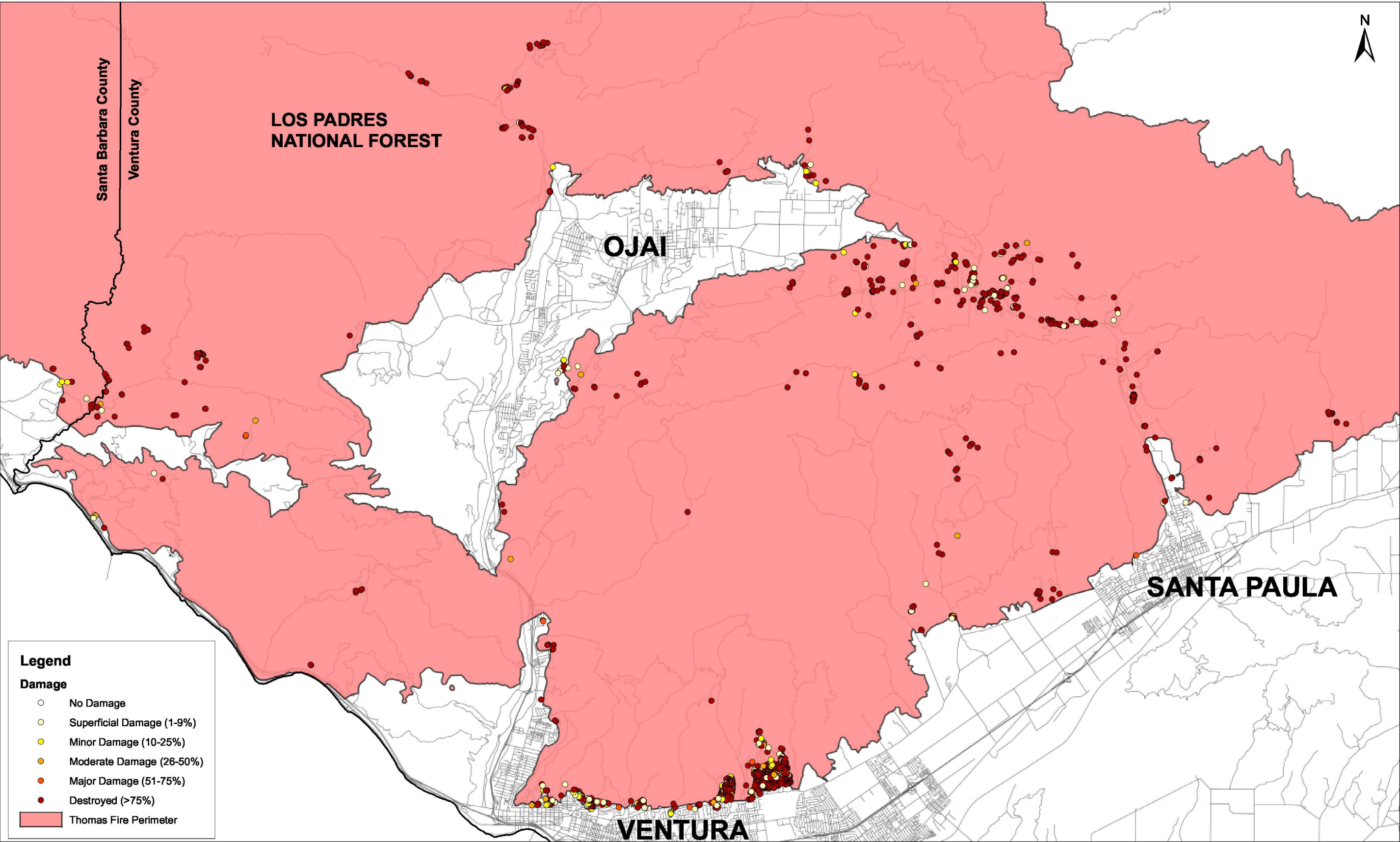
Improvement Plan Performance Matrix (cont.)

Mutual Assistance and Mutual Aid				
System Responsiveness	Provide Support and Contribute Toward Revision Efforts to the Improvement of Mutual Aid Systems.	VCOES	Dec-19	In-Progress
Effectiveness of Mobilization	1) Review and Update Mutual Aid MOUs 2) Conduct Mutual Aid Training and Workshops	VCOES	Dec-19	Not Started
Awareness of Opportunities and Process	1) Review and Update Mutual Aid MOUs 2) Conduct Mutual Aid Training and Workshop	VCOES	Dec-19	Not Started









Glossary of Terms

AAR	After-Action Review
CalOES	California Governor’s Office of Emergency Services
EAS	Emergency Alert System
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPC	Emergency Planning Council
FEMA	Federal Emergency Management Agency
HSA	Human Services Agency
ICP	Incident Command Post
IMT	Incident Management Team
MHOAC	Medical Health Operational Area Coordination
MOU	Memorandum of Understanding
OA	Operational Area
PIO	Public Information Officer
SBA	Small Business Administration
VCCEO	Ventura County Chief Executive Office
VCEMS	Ventura County Emergency Medical Services
VCFD	Ventura County Fire Protection District
VCOES	Ventura County Sheriff’s Office of Emergency Services
VCSO	Ventura County Sheriff’s Office
WEA	Wireless Emergency Alert

Participating Agencies

IN GRATITUDE FOR CONTRIBUTING AGENCIES:

Aera Energy LLC
American Red Cross
California Department of Social Services
California Governor's Office of Emergency Services
California Highway Patrol
Calleguas Municipal Water District
Caltrans
Casitas Municipal Water District
City of Ojai City Manager's Office
City of Oxnard Fire Department
City of Ventura City Manager's Office
City of Ventura Fire Department
City of Ventura Police Department
County of Ventura Animal Services Department County
of Ventura Behavioral Health
County of Ventura Emergency Medical Services Agency
County of Ventura Executive Office
County of Ventura General Services Agency
County of Ventura Health Care Agency
County of Ventura Human Services Agency
County of Ventura Information Technology Services
County of Ventura Public Health Department
County of Ventura Public Works Agency
County of Ventura Resource Management Agency
National Weather Service Forecast Office Los Angeles
Salvation Army
Southern California Edison
Southern California Gas Company
United Water Conservation District
U.S. Forest Service Fire
Ventura County Air Pollution Control District
Ventura County Area Housing Agency
Ventura County Association of Water Agencies Ventura
County Community College District
Ventura County Fire Protection District
Ventura County Office of Education
Ventura County Sheriff's Office
Ventura County Sheriff's Office of Emergency Services

PREPARED BY



*Graphic Design services provided by
County of Ventura GSA Business Support*

